

**CALIFORNIA ENERGY COMMISSION**

**INITIAL STATEMENT OF REASONS**

***Residential Clothes Washer Regulations***

**PROPOSED AMENDMENTS TO  
CALIFORNIA CODE OF REGULATIONS, TITLE 20:  
DIVISION 2, CHAPTER 4: ENERGY CONSERVATION,  
ARTICLE 4: APPLIANCE EFFICIENCY REGULATIONS  
SECTIONS 1601-1608**

Docket No. 03-AAER-01(RCW)

**September 2003**

## INTRODUCTION

The California Energy Commission proposes to adopt water efficiency standards, and regulations requiring the submittal of data on water efficiency, for residential clothes washers. The proposed efficiency standards would establish a maximum water factor (“WF”) of 8.5 for units manufactured on or after January 1, 2007, and a maximum WF of 6.0 for units manufactured on or after January 1, 2010. The proposed regulations would also required manufacturers of residential clothes washers to submit data on the water efficiency of their products.

Information on the cost-effectiveness of the proposed WF standards, public hearings, submittal of comments on the proposal, document availability, and other matters concerning the proposal is contained in the companion Notice of Proposed Action, which is available from Linda Franklin at [LFrankli@energy.state.ca.us](mailto:LFrankli@energy.state.ca.us).

## SPECIFIC PURPOSE, RATIONALE, AND NECESSITY OF EACH PROPOSED REGULATION

Existing law (Public Resources Code Section, 25402(c)) requires the Commission to adopt regulations that prescribe minimum efficiency levels for appliances. The proposed regulations would establish new standards for the water efficiency of residential clothes washers: a maximum water factor (“WF”) of 8.5 for units manufactured on or after January 1, 2007, and a maximum WF of 6.0 for units manufactured on or after January 1, 2010. (Water factor is calculated by dividing (1) the total amount of water used to wash and rinse a typical load of clothes, in gallons, by (2) the capacity of the wash tub, in cubic feet.)

The Commission first adopted appliance standards, and related definitions, test methods, information-submittal requirements, and compliance and enforcement rules, in 1976; the Commission has periodically revised the regulations since then. In 2002 the Commission adopted extensive revisions to the appliance regulations, including energy and water efficiency standards for commercial clothes washers (i.e., clothes washers that are not federally-regulated “consumer products” as defined in federal law).

The current water efficiency standard, which applies to all such commercial clothes washer units manufactured on or after January 1, 2007, prescribes a maximum WF of 9.5. (California Code of Regulations, title 20, Section 1605.3(p)(1).) After the Commission adopted the commercial clothes washer standard, the California Legislature enacted a statute that requires the Commission, not later than January 1, 2004, to “require that residential clothes washers manufactured on or after January 1, 2007, be at

least as water efficient as commercial clothes washers.” (AB 1561 (Chapter 421, Statutes of 2002), enacting Public Resources Code Section 25402(e)(1) (“AB 1561”).)

The specific purpose, and the rationale, of the proposed water efficiency standards is to save water and thereby reduce the economic and environmental costs of water heating, water pumping, and water treatment. As the Legislature stated in enacting AB 1561:

The Legislature finds and declares all of the following:

- (a) Significant amounts of energy are consumed in the state through pumping water, water treatment, and sewage treatment.
- (b) Water conservation is a proven tool that will make the most effective use of the state’s limited water supply, and will conserve energy.
- (c) A significant portion of urban water demand in the state is for residential clothes washers.

(AB 1561, Section 1.) Because the Legislature has directed the Commission to adopt water efficiency standards for residential clothes washers, it is necessary to do so. Moreover, the Commission has determined that the proposed standards are cost-effective: that is, that any increased costs to purchase more water-efficient clothes washers will be more than offset by savings in water costs.

There are several specific purposes and rationales of the proposed data-submittal requirements. First, the Legislature has required the Commission to adopt the proposed water efficiency standards, and the submittal of data is necessary to determine compliance with the standards. Second, the data required to be submitted will be used to increase consumer awareness, for utility efficiency programs, and for research, all of which will foster additional water efficiency. It is necessary to adopt the data-submittal requirements in order to meet those goals.

#### SPECIFIC ACTIONS, PROCEDURES, TECHNOLOGIES, OR EQUIPMENT; PERFORMANCE STANDARDS

The proposed regulations are performance standards. They do not mandate any particular action, procedure, technology, or equipment; any such technique may be used in order to achieve the water factor standards.

## STUDIES, REPORTS, AND DOCUMENTS RELIED UPON

1. Martin, R. Michael, & Jim Holland, California Energy Commission Staff Report: Update of Appliance Efficiency Regulations for Residential Clothes Washers (September 2003).
2. Fernstrom, Gary B., Pacific Gas & Electric Company, Analysis of Standards Options for Residential Clothes Washers (September 2003).

## ALTERNATIVES

The Legislature has required the Commission to adopt water efficiency standards for residential clothes washers. The Commission examined various alternative water factor levels. The Commission is proposing an 8.5 WF for 2007 models because that level is cost-effective and can be obtained by many currently-available models, including both top-loading and front-loading models. The Commission is proposing a 6.0 WF for 2010 models because that level is also cost-effective; however, only front-loading models have 6.0 WFs today, and the Commission believes that it is desirable (although not crucial) that the standard be achievable by top-loading models as well. The Commission is confident that the appliance industry will be able to achieve a 6.0 WF with top-loading models by the year 2010.

The Commission did not consider an efficiency standard requiring specific actions, procedures, technologies, or equipment; performance standards provide much more flexibility to the affected industry.

The Commission did not consider any alternatives to the requirement for manufacturers to submit data on the water efficiency of their residential clothes washers. Without such data it would be impossible to tell if the Legislature's water and energy efficiency goals were being met.

The Commission did not consider any alternatives for the specific purpose of avoiding impacts on small businesses, because there will be no adverse impacts.

EVIDENCE RELIED UPON TO SUPPORT THE INITIAL DETERMINATION,  
IN THE NOTICE OF PROPOSED ACTION,  
THAT THE PROPOSED REGULATIONS WILL NOT HAVE  
A SIGNIFICANT ADVERSE ECONOMIC ADVERSE IMPACT ON BUSINESS

The proposed regulations will have no effect on small business in general, because small businesses do not purchase residential clothes washers. To the extent that

any investor-owned water utilities are small businesses, the proposed regulations will have the beneficial effect of reducing water pumping and treatment costs. To the extent that any manufacturers of residential clothes washers are small businesses (the Commission does not believe that any are; moreover, no clothes washer manufacturers are located in California), those businesses will be treated exactly the same as all other manufacturers.

#### EFFORTS TO AVOID UNNECESSARY DUPLICATION OR CONFLICT WITH THE CODE OF FEDERAL REGULATIONS<sup>1</sup>

The proposed regulations neither duplicate nor conflict with any federal regulation.

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<sup>1</sup> The Commission is not required to include this information but does so here for the convenience of the reader.